Abstract of the Disclosure

VOLUME DATA NET BACKUP

A method and computer system for efficiently backing up data in a computer network. Multiple resources are grouped into nodes wherein each node includes a network adapter for allowing the node to communicate with the computer system. Each node includes a storage device, or multiple storage devices. The storage devices of each node are mapped with mirrors to form a logical volume. At least one mirror, also known as a plex is connected to both the logical volume and a network adapter for the respective node. For backup of data, the source node sends data to a target node through the network adapter. The target nodes receives data from the plex through the network adapter. In communication with the network adapter and the volume, the plex of the target node is configured to be a feed plex in that it acts as a communication pipe between the network adapter and the target node volume. Additionally, the target node volume is configured to be a feed volume for receiving data from a source node, wherein the data is replicated across all of the mirrors of the feed volume. In data restoration, the feed plex of the target node is configured as a plex and sends data from the feed volume of the target node to the network adapter. The plex of the source node in communication with the network adapter is now designated as a feed plex and the volume of the source node is now designated as a feed volume. The data from the network adapter of the source node is sent to the feed plex where it is sent to the associated feed volume. Accordingly, the direct communication of the plex of the source node and the target node with the respective network adapter provides for transfer of data across a kernel layer of both nodes without the need to access a user layer.